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**AMENDMENTS TO THE CLAIMS** 

Please amend the claims as follows:

(Currently Amended) An isolated nucleic acid molecule according to any one 1.

of SEQ ID NO:s 2, 4, 7, 9, 12, 14, 17, 19, 21, 24, 26, 29, 31, 34, 36, 39, 41, 44, 46,

49, and 51 or or 51, a fragment or analogue thereof, or an isolated nucleic acid

molecule which hybridizes to one of the foregoing sequences under stringent

conditions and which has the ability to stimulate or inhibit one or more of at least one

biological activity selected from the group consisting of vasculogenesis,

angiogenesis, vascular permeability, endothelial cell proliferation, endothelial cell

differentiation, endothelial cell migration, [and] or endothelial cell survival, or an

isolated nucleic acid molecule which hybridizes to one of the foregoing sequences

under-stringent conditions.

2. (Currently Amended) An isolated nucleic acid molecule which hybridizes to

the a compliment of a nucleic acid molecule according to Claim 1 claim 1 under

stringent conditions.

3. . (Currently Amended) An isolated siRNA molecule targeted to an isolated

nucleic acid molecule according to Claims 1 or 2 claim 1, wherein the isolated siRNA

molecule is at least 19 base pairs long.

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(Currently Amended) An expression vector comprising the isolated nucleic 4.

acid according to Claims 1 or 2 claim 2, optionally wherein the nucleic acid may be

operatively associated with a regulatory nucleic acid controlling the expression of the

polypeptide encoded by said the nucleic acid.

5. (Currently Amended) A host cell genetically engineered to contain [a] the

isolated nucleic acid according to Claims 1 or 2 claim 1.

6. (Currently Amended) A host cell transfected with an expression vector

according to Claim 4 claim 4.

7. (Currently Amended) A method of treating an angiogenesis-related condition

in a cell, group of cells, or organism, comprising the step of administering an

expression vector according to Claim 4 claim 4 to the cell, group of cells, or

organism.

(Currently Amended) An antibody with specific reactivity to a nucleic acid 8.

according to Claims 1 or 2 claim 1, wherein the antibody may preferably be

polyclonal or monoclonal and wherein the antibody may further comprise a

detectable label such as a fluorescent label.

9. (Currently Amended) A transgenic, non-human animal which has been

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genetically engineered to contain a transgene comprising a nucleic acid according to

Claims 1 or 2, preferably, claim 1, so that the transgene may be expressed.

10. (Currently Amended) A pharmaceutical composition comprising [a] an

isolated nucleic acid sequence according to Claims 1 or 2 claim 1.

11. (Currently Amended) A method of affecting vasculogenesis or angiogenesis

in a cell, group of cells, or organism, comprising the step of administering a

pharmaceutical composition according to Claim 16 claim 16 to the cell, group of

cells, or organism, wherein the pharmaceutical composition causes the affecting

may preferably cause an increase or decrease, more preferably, in the cell, group of

cells, or organism, and wherein the organism has an angiogenesis-related disorder

such as cancer, retinopathy, macular degeneration, corneal ulceration, stroke,

ischemic heart disease, infertility, ulcers, scleradoma scleroderma, wound healing,

ischemia, ischemic heart disease, myocardial infarction, myocardosis, angina

pectoris, unstable angina, coronary arteriosclerosis, arteriosclerosis obliterans,

Berger's disease, arterial embolism, arterial thrombosis, cerebrovascular occlusion,

cerebral infarction, cerebral thrombosis, cerebral embolism, rubeosis proliferative

vitreoretinopathy, chronic inflammation, inflammatory bowel disease, psoriasis,

sarcoidosis [and] or rheumatoid arthritis.

12. (Currently Amended) An isolated polypeptide comprising a sequence of

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amino acids substantially corresponding to [the] an amino acid sequence in any one

of SEQ ID NO:s 3, 5, 8, 10, 13, 15, 18, 20, 22, 25, 27, 30, 32, 35, 37, 40, 42, 45, 47,

50, and 52, or a fragment or analogue thereof, said the isolated polypeptide having

the ability to affect angiogenesis in a cell, a group of cells, or an organism.

13. (Currently Amended) A host cell genetically engineered to express [a] an

isolated polypeptide according to Claim 12 claim 12.

(Currently Amended) An antibody specifically reactive with a polypeptide 14.

according to Claim 12 claim 12, wherein the antibody may preferably be polyclonal

or monoclonal, and wherein the antibody may further comprise a detectable label

such as a fluorescent label.

(Currently Amended) A transgenic, non-human animal which has been **15**.

genetically engineered to contain a transgene comprising a nucleic acid which

encodes [a] an isolated polypeptide according to Claim 12, preferably, claim 12 so

that the transgene may be expressed.

16. (Currently Amended) A pharmaceutical composition comprising an isolated

polypeptide according to Claim 12 claim 12.

(Currently Amended) A method of affecting causing vasculogenesis or 17.

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angiogenesis in a cell, group of cells, or organism, comprising the step of administering a pharmaceutical composition according to Claim 16 claim 16 to the cell, group of cells, or organism, the affecting may preferably cause an increase or decrease, more preferably, the cell, group of cells, or organism that has an angiogenesis-related disorder such as cancer, retinopathy, macular degeneration, corneal ulceration, stroke, ischemic heart disease, infertility, ulcers, scleradoma scleroderma, wound healing, ischemia, ischemic heart disease, myocardial infarction, myocardosis, angina pectoris, unstable angina, coronary arteriosclerosis, arteriosclerosis obliterans, Berger's disease, arterial embolism, arterial thrombosis, cerebrovascular occlusion, cerebral infarction, cerebral thrombosis, cerebral embolism, rubeosis proliferative vitreoretinopathy, chronic inflammation, inflammatory bowel disease, psoriasis, sarcoidosis, or and rheumatoid arthritis.

18. (Currently Amended) A method of detecting an angiogenesis-related transcript in a cell of a patient, the method comprising contacting a biological sample from the patient with a polynucleotide that selectively hybridizes to a sequence at least 80% identical to a sequence according to any one of SEQ ID NO:s 2, 4, 7, 9, 12, 14, 17, 19, 21, 24, 26, 29, 31, 34, 36, 39, 41, 44, 46, 49, and 51, wherein an angiogenesis-related transcript is detected where hybridization is detected, preferably wherein the polynucleotide comprises a sequence according to any one of SEQ ID NO:s 2, 4, 7, 9, 12, 14, 17, 19, 21, 24, 26, 29, 31, 34, 36, 39, 41, 44, 46, 49, and 51, preferably wherein the biological sample is a tissue sample or is

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surface.

comprised of isolated nucleic acids such as mRNA, preferably wherein the nucleic acids are amplified prior to the step of contacting the biological sample with the polynucleotide, preferably and wherein the polynucleotide is immobilized on a solid

19. (Currently Amended) A method of affecting at least one bioactivity selected from angiogenesis and/or vasculogenesis in a vertebrate organism, said the method comprising the step of administering to said the organism an effective angiogenesis [or] and/or vasculogenesis affecting amount of a nucleotide or polypeptide according to Claims 1 or 12 claim 1, wherein the organism is preferably a mammal such as mice, rats, rabbits, guinea pigs, cats, dogs, pigs, cows, monkeys, and humans, wherein vasculogenesis or angiogenesis is preferably enhanced, increased, inhibited, or decreased, and wherein the organism preferably has an angiogenesisrelated disorder such as cancer, retinopathy, macular degeneration, corneal ulceration, stroke, ischemic heart disease, infertility, ulcers, scleradoma scleroderma, wound healing, ischemia, ischemic heart disease, myocardial infarction, myocardosis, angina pectoris, unstable angina, coronary arteriosclerosis, arteriosclerosis obliterans, Berger's disease, arterial embolism, arterial thrombosis, cerebrovascular occlusion, cerebral infarction, cerebral thrombosis, cerebral embolism, rubeosis proliferative vitreoretinopathy, chronic inflammation, inflammatory bowel disease, psoriasis, sarcoidosis, or and rheumatoid arthritis.

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20. (Original) A transgenic increased or decreased angiogenesis laboratory

animal comprising one or more cells in which the expression of a sequence

according to any one of SEQ ID NO:s 2, 4, 7, 9, 12, 14, 17, 19, 21, 24, 26, 29, 31,

34, 36, 39, 41, 44, 46, 49, and 51 is upregulated, downregulated, or absent.

(New) A method of affecting angiogenesis and/or vasculogenesis in a 21.

vertebrate organism, the method comprising administering to the organism an

effective angiogenesis and/or vasculogenesis affecting amount of a polypeptide

according to claim 12, wherein the organism is preferably a mammal such as mice,

rats, rabbits, guinea pigs, cats, dogs, pigs, cows, monkeys, and humans, wherein

vasculogenesis or angiogenesis is enhanced, increased, inhibited, or decreased,

and wherein the organism preferably has an angiogenesis-related disorder such as

cancer, retinopathy, macular degeneration, corneal ulceration, stroke, ischemic heart

disease, infertility, ulcers, scleroderma, wound healing, ischemia, ischemic heart

disease, myocardial infarction, myocardosis, angina pectoris, unstable angina,

coronary arteriosclerosis, arteriosclerosis obliterans, Berger's disease, arterial

embolism, arterial thrombosis, cerebrovascular occlusion, cerebral infarction,

cerebral thrombosis, cerebral embolism, rubeosis proliferative vitreoretinopathy,

chronic inflammation, inflammatory bowel disease, psoriasis, sarcoidosis, or

rheumatoid arthritis.